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09/727,465	12/04/2000	Ewald Schmon	4003.450	6567

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EXAMINER	
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ART UNIT	PAPER NUMBER
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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 09/727,465
Filing Date: December 04, 2000
Appellant(s): SCHMON, EWALD

Matthew A. Pequignot
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed June 1, 2004.

(1) Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) Status of Claims

The statement of the status of the claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Invention

The summary of invention contained in the brief is correct.

(6) Issues

The appellant's statement of the issues in the brief is correct.

(7) Grouping of Claims

Appellant's brief includes a statement that claims 12-22 do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

(8) Claims Appealed

A substantially correct copy of appealed claim 12 appears on page 11 of the Appendix to the appellant's brief. The minor errors are as follows: claim 12, line 7,

recites "thread heights of approximately 0.1 mm". It should read "thread heights of approximately 1.1 mm" (see amendment filed October 27, 2003).

(9) Prior Art of Record

4,906,151	Kubis	3-1990
6,250,567	Lewis et al.	6-2001

(10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 12-22 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Lewis et al. (6,250,567) in view of Kubis (4,906,151).

Lewis et al. discloses a spray gun comprising: a gun body 14; an air nozzle ring 18; a trapezoid thread 51.

Lewis et al. does not disclose paint. The device of Lewis is for spraying single or multicomponent material such a polyurethane. The device of Lewis is not precluded from spraying paint. It would have been obvious to a person having ordinary skill in the art at the time of the invention to have provided paint to the device of Lewis et al. for a painted finish.

Addtionally, Lewis et al. does not disclose the ranges of flank angle, thread height, root to crest clearance, flank clearance, pitch, core diameter and outer diameter tolerance, pitch tolerance, nominal diameter. Such parameters are known parameters of a trapezoid thread. Kubis discloses male and female trapozodial threads in figure 2 defining the diameters, thread height, root to crest clearance and flank clearance. It would have been obvious to one having ordinary skill in the art at the time the invention

was made to have provided claimed ranges/values for optimization dependent on application criteria, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

(11) Response to Argument

Appellant argues that the specified claimed parameters are not disclosed by Kubis. Kubis is **relied on for further evidence** that trapezoid thread diameter, thread height, root to crest clearance and flank clearance are known parameters of a trapezoid thread in addition to appellant's admission, in the specification pages 1-2, that such parameters are disclosed in ISO standard DIN 103. Kubis is cited because Lewis does not explicitly disclose that those parameters of a trapezoid thread are known. The rejection under 35 USC 103 relies on *In re Aller* which held that discovering the optimum or workable ranges involves only routine skill in the art. Kubis is not relied on for the specific teachings of the optimum or workable ranges. Therefore, it appears that appellant's argument of nonanalogous art is moot. Nevertheless, response is provided below.

In response to applicant's argument that Kubis is nonanalogous art, it has been held that a prior art reference must either be in the field of appellant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the appellant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Kubis is in appellant's field of endeavor. Both appellant and Kubis relate to trapezoid

threads. Kubis is concerned with trapezoid screw thread. Appellant provides ISO DIN 103 in the Background of the Invention section of appellant's specification. The ISO standard is a general standard not specifically identified for spray gun air nozzle rings. Kubis is as much in appellant's field of endeavor as ISO DIN 103. Arguendo, even if the Board finds that Kubis is not in appellant's field of endeavor, Kubis is pertinent to the particular problem with which appellant was concerned. Appellant is concerned with cross threading and misalignment. See appellant's specification on page 2, lines 5-13. Improper sealing is inherent in cross-threading as well as misalignment. Kubis is concerned with producing a proper seal to liquids and gases (Kubis, column 1, lines 58-60 and in the abstract, lines 4-5). Lewis too recognizes these problems in column 4, lines 40-54::

> A plurality of trapezoidal guide threads 51 are used to **guide** the delivery tube 14 coaxially into position within the manifold 18. The flats 52 of the threads 51 are formed to **close tolerance** to hold the outer diameter of the delivery tube so that the tip 30 is **precisely centered** within the hole 45 in the air cap as shown in FIG. 3. The **guide** threads 51 **guide** the tube 14 as it is inserted into the manifold 18 to center the tube properly. A plurality of sharp threads 53, which are cutting threads, cut into the tube to form **close fitting relationship** between the manifold and the tube with the tip 30 being **centered** within the opening 45 in the air cap 26. This unique arrangement of threads in the manifold 18 insures the **precise positioning** of the exit end 30 of the delivery tube within the center of the hole 45 in the air cap 26. (Bold added)

Lewis is concerned with trapezoidal threads which guide and center manifold 18 onto tube 14. The cutting threads 53 provide a close fitting relationship between the manifold

18 and tube 14. Kubis provides teaches a trapezoidal thread which provides a perfect seal (tight/close fit).

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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June 17, 2004

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